3.9 CULTURAL AND HISTORIC RESOURCES

3.9.1 Applicable Sections in FERC Documents

Please refer to Section 3.10 in the FERC Final EIS and Resource Report 4, Cultural Resources, in Exhibit F-1 of GSX-US's original application to FERC.

3.9.2 Issue 29: Eligibility of Prehistoric Sites~~1~~

Issue Summary

Description of Problem

Eligibility status of prehistoric site 45WH536 is equivocal because the Final EIS states differences in opinion between the cultural resources contractor and Office of Archaeology and Historic Preservation (OAHP). If the site is eligible, what steps will be taken to protect it from adverse impacts? What are the results, if any, of the proposed survey of the remaining 4.3 miles of corridor? Moreover, what is the status of evaluation at the other two prehistoric sites and one historic site where landowner permission was being sought prior to testing?

Ecology Requirement

Clearly state the eligibility status of prehistoric site 45WH536 in the environmental review and, if it is eligible for listing on the National Register of Historic Places (NRHP), the steps to be taken to protect it from adverse impacts. Also, state in the environmental review whether a pedestrian survey was conducted and what the results were for the remaining 4.3 miles of pipeline corridor for which landowner permission was being sought. Determine eligibility status for the remaining two prehistoric sites and one historic site for which testing was recommended pending landowner permission.

Affected Environment

Although the National Register status of prehistoric sites 45WH536, 45WH535, and 45WH534, and historic site 37-15 have not been resolved, GSX-US will treat the sites as if they are eligible for listing and will attempt to avoid the resources. If avoidance is not feasible, GSX-US will consult with OAHP and affected Indian tribes to determine the sites' significance and formulate treatment plans.

GSX-US has surveyed segments of the pipeline corridor that were not assessed during the 1999 and 2000 work because of landowner refusals. Results of these surveys and OAHP concurrence should be included in this document when they are completed.

Impacts

Proposed Action

GSX-US

Based on the current design for the GSX-US project, cultural resources that may be eligible for listing in the National Register will be avoided. Therefore, no significant adverse impacts are expected. However, the results of additional archaeological surveys have not been compiled. The results of these studies may identify additional resources in the project area.

GSX-Canada

On the GSX-Canada project, the recent ruling by the NEB Joint Review Panel noted that a Heritage Resource Impact Assessment for the previously unsurveyed portions of the terrestrial route had not yet been completed. Therefore, GSX-Canada must file with the NEB for approval the results of that survey and proposed mitigation measures. The final Underwater Archaeological Assessment was also filed late in the process and had not been provided to the provincial authority responsible for archaeology. Therefore, GSX-Canada must file with the NEB for approval any comments and recommendations on the underwater assessment from the British Columbia Ministry of Sustainable Resource Management, Archaeology Branch.

GSX-Canada's assessment indicated that both the terrestrial and marine portions of the GSX-Canada route are currently used for traditional purposes, and include harvesting of marine resources, hunting and possibly plant harvesting. GSX-Canada reached an agreement on the concerns First Nations had previously expressed regarding their interests. The panel concluded that it is unlikely there will be significant adverse effects to the resources used for traditional purposes, and that it is also unlikely that the project would cause significant adverse effects to the current use of lands and resources for traditional purposes by aboriginal persons (National Energy Board 2003).

Terasen Gas Alternative

Terasen Gas has not undertaken any detailed analyses of potential impacts on cultural, archaeological, or historic resources resulting from its proposal. First Nation consultation is required as part of the Crown Land acquisition process and is considered a component of meeting the air emissions permit consultation requirements. Typically, the consultation process is comprised of three key components:

- Stakeholder and First Nations identification
- Project notification
- Communications activities

Typically, to complete these efforts the Applicant undertakes a public consultation process that includes public notices in local newspapers, open houses, mail outs and door-knocking campaigns as necessary to ensure that the public is aware of activities and is provided adequate

opportunity to comment. This process may take two to six months to complete. This consultation work would be documented and submitted in support of the BCUC approval processes. First Nation consultation is often an on-going process throughout the project (NorskeCanada 2003).

No Action Alternative

NorskeCanada has not undertaken any detailed analyses of potential impacts on cultural, archaeological, or historic resources resulting from its proposal. As with the Terasen Gas proposal, First Nation consultation is required as part of the Crown Land acquisition process and is considered a component of meeting the air emission permit consultation requirements.

Mitigation Measures

Proposed Action

Should the pipeline route change and make avoidance of cultural sites infeasible, GSX-US should consult with OAHP and affected Indian tribes. If the resources are determined to be National Register-eligible, a treatment plan should be devised.

Terasen Gas Alternative

As part of its ongoing operational strategy, TGVI has developed Memoranda of Understanding (MOUs) with most First Nations in its operational area. While these MOUs do not contain specific commitments, they reflect TGVI's general commitment to working with local First Nations to the betterment of both. TGVI will undertake all First Nation consultation necessary to ensure successful completion of these facilities.

No Action Alternative

No specific mitigation measures have been identified for the NorskeCanada proposal. However, it would have to undertake First Nation consultation necessary to secure approval of its proposed facilities.

Significant Unavoidable Adverse Impacts

With adequate implementation of protective measures, no significant unavoidable adverse impacts would be anticipated.

3.9.3 Issue 30: Plan for Unanticipated Discovery~~2~~

Issue Summary

Description of Problem

The Final EIS states that a plan has been submitted "in the event that any unanticipated historic properties or human remains are encountered during construction." However, no details on protocol have been provided.

Ecology Requirement

Provide a summary of the plan for unanticipated discovery in the environmental review and specify that this would also be applicable for prehistoric and ethnohistoric properties.

Affected Environment

No additional analysis required.

Impacts

Proposed Action

No additional analysis required.

Terasen Gas Alternative

No additional analysis required.

No Action Alternative

No additional analysis required.

Mitigation Measures

Proposed Action

GSX-US

GSX-US has produced an Unanticipated Discovery Plan that is included in Resource Report 4, Cultural Resources, in Exhibit F-1 of GSX-US's original application to FERC. The plan was accepted by FERC. However, the plan has yet to be reviewed by OAHP and affected Indian tribes and incorporated into a Memorandum of Agreement.

The Unanticipated Discovery Plan proposes that in the event any potential historic properties are discovered:

- Work in the vicinity of the find would be stopped and physical barriers be installed to protect the resource.
- FERC, OAHP, affected Indian tribes and First Nations, GSX-US's archaeological contractor, and the landowner would be contacted.
- The archaeological contractor would evaluate the discovery in consultation with the agencies, Indian tribes, and First Nations and prepare a report with treatment recommendations for their concurrence.
- Construction would resume in the area after the treatment plan had been approved, implemented, and completed.
- If human burials are discovered, the county sheriff and coroner would be contacted; depending on the nature of the burial, GSX-US would follow appropriate state procedures for non-Indian burials or would consult with the agencies, Indian tribes, and First Nations on treatment and accommodate to the extent feasible the concerns and requests of the affected Indian tribes and First Nations, in addition to the above procedures.

GSX-Canada

Refer to Issue 1.

Terasen Gas Alternative

Refer to Issue 1.

No Action Alternative

Refer to Issue 1.

Significant Unavoidable Adverse Impacts

With implementation of mitigation measures, significant unavoidable adverse impacts would not be anticipated.

3.9.4 Issue 31: Impacts of Route Changes

Issue Summary

Description of Problem

The Final EIS states that much of the proposed pipeline right-of-way follows existing pipeline rights-of-way, which were surveyed for cultural resources in the early 1990s. However, the Final EIS does not specify where the routes diverge or summarize the results of the earlier survey and what implications it offers for the occurrence of cultural resources in the current right-of-way.

Ecology Requirement

Include maps in the environmental review that show those portions of the route that diverge from the existing right-of-way because these areas would presumably have received no prior archaeological surveys. Since the proposed right-of-way follows the existing right-of-way, summarize previous survey results and their implications for cultural resources in the current project area.

Affected Environment

GSX-US surveyed the proposed pipeline route where landowner permission was granted, including areas that were surveyed for cultural resources in the 1990s. Maps showing the survey areas and existing right-of-way appear in the June 2000 cultural resources report (Hess et al. 2000). Previous survey results suggested that environments such as river and stream banks, lake and marine shorelines, wetland and spring margins, and higher ground including terraces, prairies, hilltops, and ridge lines would be more likely to contain archaeological materials (Hess and Thompson 2000). Archaeologists surveyed, evaluated resources, and monitored construction in the late 1980s and early 1990s for the ARCO Ferndale pipeline identifying 17 archaeological sites and 5 historic structures that are located within one mile of the proposed GSX-US pipeline route. Of these resources, 6 archaeological sites are listed as "close," or less than 0.25 mile, to the route (Hess and Thompson 2000). One previously recorded archaeological site, 45WH52 was re-recorded during the 2000 survey although it is located outside of the GSX-US project Area of Potential Effect (APE) (Hess et al. 2000).

Impacts

Proposed Action

No additional analysis required.

Terasen Gas Alternative

No additional analysis required.

No Action Alternative

No additional analysis required.

Mitigation Measures

Proposed Action

Should the pipeline route change making avoidance of cultural sites infeasible, then GSX-US should consult with OAHP and affected Indian tribes. If the resources are determined to be National Register-eligible then a treatment plan should be devised.

Terasen Gas Alternative

Refer to Issue 1.

No Action Alternative

Refer to Issue 1.

Significant Unavoidable Adverse Impacts

With implementation of mitigation measures, significant unavoidable adverse impacts would not be anticipated.

3.9.5 Issue 32: Cultural Resource Testing Methods4

Issue Summary

Description of Problem

The Final EIS states that cultural resource testing was conducted without specifying the methodology (judgmental or random testing? auger probes or shovel tests? depositional settings? depths?)

Ecology Requirement

Summarize the testing methodology in the environmental review so the reviewer can determine the degree to which archaeological visibility and test results were attributable to real distribution patterns or methodological limitations.

Affected Environment

The cultural resources pedestrian survey included surface scrapes on terraces, prairies, upland margins, hilltops and ridge lines. Surveyors augmented the assessment with subsurface probes in river and stream bank, lake and marine shoreline, wetland and spring margin, and higher ground in floodplain environments. Subsurface investigations included excavation of judgmental 4 inch-diameter auger probes to delineate subsurface site boundaries and screening of excavated materials through 1/8-inch wire mesh (Hess and Thompson 2000; Hess et al. 2000). Two sites (37-20 - a historic period debris scatter and 45WH536 - a prehistoric site), for which landowner permission was obtained, were tested. Testing methods included excavating auger probes at the first site, shovel test probes at the second, and approximately 3-foot by 3-foot excavation units at both sites. Subsurface test units were dug to approximately 8 inches below cultural material (Zachman et al. 2000).

Impacts

Proposed Action

No additional analysis required.

Terasen Gas Alternative

No additional analysis required.

No Action Alternative

No additional analysis required.

Mitigation Measures

Proposed Action

No additional analysis required.

Terasen Gas Alternative

No additional analysis required.

No Action Alternative

No additional analysis required.

Significant Unavoidable Adverse Impacts

No additional analysis required.

3.9.6 Issue 33~~5~~: Archaeological Site 45WH536

Issue Summary

Description of Problem

The Final EIS states that the OAHP considers a certain prehistoric site to be significant with the assertion, "that it is not well represented in the archaeological record" without any explanation as to the nature of the site or its contents.

Ecology Requirement

Clearly state the type of site and its features or artifact assemblage in the environmental review to clarify OAHP's assertion of significance.

Affected Environment

OAHP considers archaeological site 45WH536 to be significant. The site is a shallow scatter of prehistoric stone tools, bone artifacts, and fire-cracked rock. Few resources of this type have been recorded in interior western Washington (Whitlam, pers. comm., 2000, 2003; Zachman et al. 2000).

Impacts

Proposed Action

No additional analysis required.

Terasen Gas Alternative

No additional analysis required.

No Action Alternative

No additional analysis required.

Mitigation Measures

Proposed Action

No additional analysis required.

Terasen Gas Alternative

No additional analysis required.

No Action Alternative

No additional analysis required.

Significant Unavoidable Adverse Impacts

No additional analysis required.

3.9.7 Issue 34: Eligibility Status of Five Sites~~6~~

Issue Summary

Description of Problem

The Final EIS cites the following five historic cultural resources: 37-15, 37-16, 37-17, 37-19, and 37-20 without identifying eligibility status. Potential indirect impacts on the historic telegraph line/road community of Gera are not discussed.

Ecology Requirement

Include a determination of eligibility for the aforementioned cultural resources in the environmental review and, if found eligible for inclusion on the NRHP, discuss the potential indirect impacts (e.g., visual impacts, etc.) on Gera.

Affected Environment

Site 37-15 (HRA-WH-4H), a historic period wood cutter's camp, may be eligible for listing in the National Register. However, the landowner has denied permission for additional testing of the resource to determine its significance. Site 37-16 (HRA-WH-3H), the Grandview farmstead, is ineligible for listing in the National Register as an archaeological site because no research potential exists in the debris scatter associated with the site. A search of historical documents also indicated that the site was not eligible for listing in the National Register under Criterion B because it is not associated with any person important in local or state history. Site 37-17 (HRA-WH-7H), the South Sumas Road site, is a low-density historic period debris scatter. The site does not retain integrity and is therefore not eligible for listing in the National Register. Site 37-19 (HRA-WH-9H), the Easterbrook Grade site, is another low-density historic period debris scatter that is not significant because it lacks diversity and integrity. Site 37-20 (HRA-WH-6H), the Telegraph Trail site, is a historic period debris scatter near a telegraph route and road associated with the former community of Gera. This site was tested (see Issue 4) and determined not to be eligible for listing in the National Register. The site has no standing structures and would therefore not experience indirect impacts from the GSX-US project (Hess et al. 2000; Zachman et al. 2000).

Impacts

Proposed Action

No additional analysis required.

Terasen Gas Alternative

No additional analysis required.

No Action Alternative

No additional analysis required.

Mitigation Measures

Proposed Action

No additional analysis required.

Terasen Gas Alternative

No additional analysis required.

No Action Alternative

No additional analysis required.

Significant Unavoidable Adverse Impacts

No additional analysis required.

3.9.8 Issue 35: Construction Impacts~~7~~

Issue Summary

Description of Problem

The Final EIS did not adequately assess potential impacts on cultural/historic resources of project staging areas, temporary work areas, and access roads.

Ecology Requirement

Facility sites, all project staging and temporary work areas, and access roads should be evaluated for potential impacts on cultural/historic resources. OAHP review comments and opinion should be included or summarized in the SEPA documentation.

The concurrence letter from OAHP for the underwater archeological work should be incorporated in the SEPA document. A subsequent concurrence letter for the onshore portion of the project should also be included or discussion provided in the SEPA document.

Affected Environment

GSX-US surveyed access roads and staging areas as well as a 300-foot-wide corridor centered on the proposed pipeline centerline. During the initial and one supplemental survey in 2000, approximately 4.3 miles of the pipeline right-of-way was not surveyed because of landowner

refusals. The results of additional archaeological survey since then have not been compiled. The results of these studies may identify additional resources in the project area.

Impacts

Proposed Action

No additional analysis required.

Terasen Gas Alternative

No additional analysis required.

No Action Alternative

No additional analysis required.

Mitigation Measures

Proposed Action

No additional analysis required.

Terasen Gas Alternative

No additional analysis required.

No Action Alternative

No additional analysis required.

Significant Unavoidable Adverse Impacts

No additional analysis required.